AUTHOR INDEX

A

Abreu, E. *See* Ellis, Wallis, Abreu, and Pfenninger.
Absher, P. M. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Adair, W. S. *See* Collin-Osdoby and Adair.
— *See* Goodenough, Adair, Collin-Osdoby, and Heuser.
Adam, M. *See* Pan, Teng, Wu, Adam, and Johnstone.
Adams, M. A. *See* Fuller, Otto, Woloski, McGary, and Adams.
Adelstein, R. S. *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Adesnik, M. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Akeson, R. *See* Williams, Goridis, and Akeson.
Albertini, D. F. *See* Valberg and Albertini.
Alberts, B. M. *See* Eichele, Tickle, and Alberts.
Albrechtsen, M. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Alexson, S. E. H., Fujiki, Y., Shio, H., and Lazarow, P. B. Partial disassembly of peroxisomes. 294.
Ammerer, G. *See* Bernstein, Hoffmann, Ammerer, and Schekman.
Andresen, P. B. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Anglister, L., and McMahan, U. J. Basal lamina directs acetylcholinesterase accumulation at synaptic sites in regenerating muscle. 735.
Appel, S. H. *See* Smith, McManaman, and Appel.
Arndt-Jovin, D. J., Robert-Nicoud, M., Baurschmidt, P., and Jovin, T. M. Immunofluorescence localization of Z-DNA in chromosomes: quantitation by scanning microphotometry and computer-assisted image analysis. 1422.
Arnold, J. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Arpin, M. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Atkinson, P. H. *See* Kabcenell and Atkinson.
— *See* Pollack and Atkinson.
Atkinson, P. H. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
August, J. T. *See* Chen, Murphy, Willingham, Pastan, and August.

B

Badwey, J. A. *See* Robinson, Badwey, Karnovsky, and Karnovsky.
Bainton, D. F. *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
Baker, T. J. *See* Giulian and Baker.
Banerjee, D., Mukherjee, T. K., and Redman, C. M. Biosynthesis of high density lipoprotein by chicken liver: intracellular transport and proteolytic processing of nascent apolipoprotein A-I. 1219.
Barak, L. S. *See* Tank, Fredericks, Barak, and Webb.
Baron, R., Neff, L., Louvard, D., and Courtoy, P. J. Cell-mediated extracellular acidification and bone resorption: evidence for a low pH in resorbing lacunae and localization of a 100-kD lysosomal membrane protein at the osteoclast ruffled border. 2210.
Barritault, D. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Bartnik, E., Osborn, M., and Weber, K. Intermediate filaments in non-neuronal cells of invertebrates: isolation and biochemical characterization of intermediate filaments from the esophagal epithelium of the mollusc *Helix pomatia*. 427.
Baurschmidt, P. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.
Bayna, E. M. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Becker, W. M. *See* Titus and Becker.
Behrens, J., Birchmeier, W., Goodman, S. L., and Imhof, B. A. Dissociation of Madin-Darby canine kidney epithelial cells by the monoclonal antibody anti-Arc-1: mechanistic aspects and identification of the antigen as a component related to uvomorulin. 1307.
Bell, C. E. *See* Maruyama, Bell, and Majerus.
Bellamy, A. R. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
Benson, R. J. J., Porter-Jordan, K., Buoniconti, P., and Fine, R. E. Biochemical and cytochemical evidence indicates that coated vesicles in chick embryo myotubes contain newly synthesized acetylcholinesterase. 1930.
Berger, E. G. *See* Tassin, Paintrand, Berger, and Bornens.
Bergmann, J. E. *See* Gabel and Bergmann.
Berlin, R. D. *See* Brown and Berlin.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Berman, S. A. *See* Bursztajn, Berman, McManaman, and Watson.
Bernfield, M. *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.
Bernier, D. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Bernstein, M., Hoffmann, W., Ammerer, G., and Schekman, R. Characterization of a gene product (Sec53p) required for protein assembly in the yeast endoplasmic reticulum. 2374.
Betz, H. *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Bhorjee, J. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Bienz, D. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Binder, L. I., Frankfurter, A., and Rebhun, L. I. The distribution of tau in the mammalian central nervous system. 1371.
Birchmeier, W. *See* Behrens, Birchmeier, Goodman, and Imhof.
Biswas, D. K. *See* Wong and Biswas.
Black, C. M. *See* Clayton, Black, and Lloyd.
Bloch, R. J. *See* Shear and Bloch.
Bloom, G. S. *See* Hirokawa, Bloom, and Vallee.
Bloom, S. E. *See* Muscarella, Vogt, and Bloom.
Bock, E. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Bonatti, S. *See* Torrisi and Bonatti.
Boquet, P. *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Borisy, G. G. *See* Kuriyama and Borisy.
Bornens, M. *See* Tassin, Paintrand, Berger, and Bornens.
Bornstein, P. *See* Majack, Cook, and Bornstein.
Both, G. W. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.
Bouck, G. B. *See* Dubreuil and Bouck.
Bourguignon, L. Y. W., Suchard, S. J., Nagpal, M. L., and Glenney, J. R., Jr. A T-lymphoma transmembrane glycoprotein (GP 180) is linked to the cytoskeletal protein, fodrin. 477.
Boyles, J., Fox, J. E. B., Phillips, D. R., and Stenberg, P. E. Organization of the cytoskeleton in resting, discoid platelets: preservation of actin filaments by a modified fixation that prevents osmium damage. 1463.
Brackenbury, R. *See* Friedlander, Brackenbury, and Edelman.
— *See* Friedlander, Brackenbury, and Edelman.
Brady, S. T. *See* Schroer, Brady, and Kelly.
Brammer, M. *See* Jessen, Morgan, Brammer, and Mirsky.
Brandan, E., Maldonado, M., Garrido, J., and Inestrosa, N. C. Anchorage of collagen-tailed acetylcholinesterase to the extracellular matrix is mediated by heparan sulfate proteoglycans. 985.
Brands, R., Snider, M. D., Hino, Y., Park, S. S., Gelboin, H. V., and Rothman, J. E. Retention of membrane proteins by the endoplasmic reticulum. 1724.

Branton, D. *See* Wiedenmann, Lawley, Grund, and Branton.
Bridoux, A. M. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Briggs, M. M. *See* Schachat, Canine, Briggs, and Reedy.
Brinkley, B. R. *See* Valdivia and Brinkley.
Brodsky, F. M. Clathrin structure characterized with monoclonal antibodies. I. Analysis of multiple antigenic sites. 2047.
— Clathrin structure characterized with monoclonal antibodies. II. Identification of in vivo forms of clathrin. 2055.
Brokaw, C. J. *See* Ward, Brokaw, Garbers, and Vacquier.
Bronner-Fraser, M. Alterations in neural crest migration by a monoclonal antibody that affects cell adhesion. 610.
Brown, D. *See* Carpentier, Brown, Iacopetta, and Orci.
Brown, P. A., and Berlin, R. D. Packing volume of sedimented microtubules: regulation and potential relationship to an intracellular matrix. 1492.
— *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Bryan, J., and Coluccio, L. M. Kinetic analysis of F-actin depolymerization in the presence of platelet gelsolin and gelsolin–actin complexes. 1236.
Buchanan, M. J. *See* Imam, Buchanan, Shin, and Snell.
Buck, C. *See* Horwitz, Duggan, Greggs, Decker, and Buck.
Bullivant, S. *See* Kistler, Kirkland, and Bullivant.
Bunge, R. P. *See* Ratner, Bunge, and Glaser.
Buoniconti, P. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
Burgart, L. J. *See* Shen and Burgart.
Burgess, T. L., Craik, C. S., and Kelly, R. B. The exocrine protein trypsinogen is targeted into the secretory granules of an endocrine cell line: studies by gene transfer. 639.
Burgess, W. H. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Burstein, D. E., Seeley, P. J., and Greene, L. A. Lithium ions inhibit nerve growth factor–induced neurite outgrowth and phosphorylation of nerve growth factor–modulated microtubule-associated proteins. 862.
Bursztajn, S., Berman, S. A., McManaman, J. L., and Watson, M. L. Insertion and internalization of acetylcholine receptors at clustered and diffuse domains on cultured myotubes. 104.
Busa, W. B., Ferguson, J. E., Joseph, S. K., Williamson, J. R., and Nuccitelli, R. Activation of frog (*Xenopus laevis*) eggs by inositol trisphosphate. I. Characterization of Ca^{2+} release from intracellular stores. 677.
Butler-Browne, G. S. Whalen, Toutant, Butler-Browne, and Watkins.
— *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Buxbaum, R. E. *See* Joshi, Chu, Buxbaum, and Heidemann.
Byers, S. W. *See* Hadley, Byers, Suárez-Quian, Kleinman, and Dym.

C

Campbell, K. P. *See* Jorgensen, Shen, and Campbell.
Canine, A. C. *See* Schachat, Canine, Briggs, and Reedy.
Cardell, E. L. *See* Cardell, Michaels, Hung, and Cardell.
Cardell, R. R., Jr., Michaels, J. E., Hung, J. T., and Cardell, E. L. SERGE, the subcellular site of initial hepatic glycogen deposition in the rat: a radioautographic and cytochemical study. 201.
Carey, D. J. *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Carley, W. W. *See* Peters, Carley, and Palade.
Caron, J. M., Jones, A. L., and Kirschner, M. W. Autoregulation of tubulin synthesis in hepatocytes and fibroblasts. 1763.
Carpentier, J.-L., Brown, D., Iacopetta, B., and Orci, L. Detection of surface-bound ligands by freeze-fracture autoradiography. 887.
Carroll, R. C. *See* Wheeler, Gerrard, and Carroll.
Case, S. T. *See* Kao and Case.
Castello, C. *See* Quillen, Castello, Krishan, and Rubin.
Caulfield, J. P., and Cianci, C. M. L. Human erythrocytes adhering to schistosomula of *Schistosoma mansoni* lyse and fail to transfer membrane components to the parasite. 158.
Ceccarelli, B. *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
— *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
Cerny, L. *See* Grove, Cerny, Perriard, and Eppenberger.
Chantler, P. D. Calcium-dependent association of a protein complex with the lymphocyte plasma membrane: probable identity with calmodulin-calcineurin. 207.
Chapman, A. B., Knight, D. M., and Ringold, G. M. Glucocorticoid regulation of adipocyte differentiation: hormonal triggering of the developmental program and induction of a differentiation-dependent gene. 1227.
Chen, J.-M., and Little, C. D. Cells that emerge from embryonic explants produce fibers of type IV collagen. 1175.
Chen, J. W., Murphy, T. L., Willingham, M. C., Pastan, I., and August, J. T. Identification of two lysosomal membrane glycoproteins. 85.
Cheng, T. P. O., and Reese, T. S. Polarized compartmentalization of organelles in growth cones from developing optic tectum. 1473.
Cheung, W. Y. *See* Cooper, McLaughlin, Tallant, and Cheung.
Chien, S. *See* Sung, Kabat, and Chien.
— *See* Sung, Kabat, and Chien.
Chin, S. S. M. *See* Napolitano, Pachter, Chin, and Liem.
Choppin, P. W. *See* Roos and Choppin.
— *See* Roos and Choppin.
Christiansson, A., Kuypers, F. A., Roelofsen, B., Op den Kamp, J. A. F., and van Deenen, L. L. M. Lipid molecular shape affects erythrocyte morphology: a study involving replacement of native phosphatidylcholine with different species followed by treatment of cells with sphingomyelinase C or phospholipase A_2. 1455.
Chu, D. *See* Joshi, Chu, Buxbaum, and Heidemann.
Chuong, C.-M., and Edelman, G. M. Expression of cell-adhesion molecules in embryonic induction. I. Morphogenesis of nestling feathers. 1009.
—, and Edelman, G. M. Expression of cell-adhesion molecules in embryonic induction. II. Morphogenesis of adult feathers. 1027.
Cianci, C. M. L. *See* Caulfield and Cianci.
Clayton, L., Black, C. M., and Lloyd, C. W. Microtubule nucleating sites in higher plant cells identified by an auto-antibody against pericentriolar material. 319.
Cleveland, D. W. *See* Pittenger and Cleveland.
Cluzeaud, F. *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Cohen, S. *See* Grinstein, Cohen, Goetz, and Rothstein.
Coleman, T. R., and Mooseker, M. S. Effects of actin filament cross-linking and filament length on actin–myosin interaction. 1850.
Coles, L. S. *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Collin-Osdoby, P., and Adair, W. S. Characterization of the purified *Chlamydomonas minus* agglutinin. 1144.
— *See* Goodenough, Adair, Collin-Osdoby, and Heuser.
Colman, A., Jones, E. A., and Heasman, J. Meiotic maturation in *Xenopus* oocytes: a link between the cessation of protein secretion and the polarized disappearance of Golgi apparati. 313.
Coluccio, L. M. *See* Bryan and Coluccio.
Connolly, T. P. *See* Hoppe, Connolly, and Hubbard.
Connor, J., and Huang, L. Efficient cytoplasmic delivery of a fluorescent dye by pH-sensitive immunoliposomes. 582.
Cook, S. C. *See* Majack, Cook, and Bornstein.
Cooper, N. G. F., McLaughlin, B. J., Tallant, E. A., and Cheung, W. Y. Calmodulin-dependent protein phosphatase: immunocytochemical localization in chick retina. 1212.
Cornbrooks, C. J. *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Couchie, D., Fages, C., Bridoux, A. M., Rolland, B., Tardy, M., and Nunez, J. Microtubule-associated proteins and in vitro astrocyte differentiation. 2095.
Courtois, Y. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Courtoy, P. J. *See* Baron, Neff, Louvard, and Courtoy.
Courty, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Cowan, N. J. *See* Lewis, Lee, and Cowan.

Cowin, P., Kapprell, H.-P., and Franke, W. W. The complement of desmosomal plaque proteins in different cell types. 1442.
Cox, G. F. *See* Maher, Cox, and Singer.
Crabb, J. H., and Jackson, R. C. In vitro reconstitution of exocytosis from plasma membrane and isolated secretory vesicles. 2263.
Cragoe, E. J., Jr. *See* Ghosh, Wellner, Cragoe, and Wu.
Craig, R. *See* Vibert and Craig.
Craik, C. S. *See* Burgess, Craik, and Kelly.
Crissman, H. A., Darzynkiewicz, Z., Tobey, R. A., and Steinkamp, J. A. Normal and perturbed Chinese hamster ovary cells: correlation of DNA, RNA, and protein content by flow cytometry. 141.
Crow, M. T. *See* Miller, Crow, and Stockdale.

D

Dahlin, J. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Dale, B. A., Holbrook, K. A., Kimball, J. R., Hoff, M., and Sun, T.-T. Expression of epidermal keratins and filaggrin during human fetal skin development. 1257.
D'Amore, P. A. *See* Herman and D'Amore.
Daniels, L. S. *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Danø, K. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Darzynkiewicz, Z. *See* Crissman, Darzynkiewicz, Tobey, and Steinkamp.
Daukas, G., and Zigmond, S. H. Inhibition of receptor-mediated by not fluid-phase endocytosis in polymorphonuclear leukocytes. 1673.
Dautry-Varsat, A. *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Davies, P. F., Truskey, G. A., Warren, H. B., O'Connor, S. E., and Eisenhaure, B. H. Metabolic cooperation between vascular endothelial cells and smooth muscle cells in co-culture: changes in low density lipoprotein metabolism. 871.
Davis, B. H. *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
De Camilli, P. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
De Mey, J. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Deanin, G. G. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Decker, C. *See* Horwitz, Duggan, Greggs, Decker, and Buck.
Dennis, J. E. *See* Shimizu, Dennis, Masaki, and Fischman.
Dharmsathaphorn, K. *See* Madara and Dharmsathaphorn.
DiFlorio, R. *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Di Salvo, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
DiStefano, P. S., Schweitzer, J. B., Taniuchi, M., and Johnson, E. M., Jr. Selective destruction of nerve growth factor receptor–bearing cells in vitro using a hybrid toxin composed of ricin A chain and a monoclonal antibody against the nerve growth factor receptor. 1107.
Dixit, V. M. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
Doctor, J., Fristrom, D., and Fristrom, J. W. The pupal cuticle of *Drosophila*: biphasic synthesis of pupal cuticle proteins in vivo and in vitro in response to 20-hydroxyecdysone. 189.
Donaldson, D. J., Mahan, J. T., Hasty, D. L., McCarthy, J. B., and Furcht, L. T. Location of a fibronectin domain involved in newt epidermal cell migration. 73.
Doxsey, S. J., Sambrook, J., Helenius, A., and White, J. An efficient method for introducing macromolecules into living cells. 19.
Drubin, D. G., Feinstein, S. C., Shooter, E. M., and Kirschner, M. W. Nerve growth factor–induced neurite outgrowth in PC12 cells involves and the coordinate induction of microtubule assembly and assembly-promoting factors. 1799.
Dubreuil, R. R., and Bouck, G. B. The membrane skeleton of a unicellular organism consists of bridged, articulating strips. 1884.
Duggan, K. *See* Horwitz, Duggan, Greggs, Decker, and Buck.
Du Maine, A. *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
Dym, M. *See* Hadley, Byers, Suárez-Quian, Kleinman, and Dym.

E

Edelman, G. M. *See* Chuong and Edelman.
— *See* Friedlander, Brackenbury, and Edelman.
— *See* Reiger, Grumet, and Edelman.
Edwards, K. B. *See* Varnum, Edwards, and Soll.
Eguchi, G. *See* Owaribe and Eguchi.
Eichele, G., Tickle, C., and Alberts, B. M. Studies on the mechanism of retinoid-induced pattern duplications in the early chick limb bud: temporal and spatial aspects. 1913.
Eisenhaure, B. H. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Ellis, L., Wallis, I., Abreu, E., and Pfenninger, K. H. Nerve growth cones isolated from fetal rat brain. IV. Preparation of a membrane subfraction and identification of a membrane glycoprotein expressed on sprouting neurons. 1977.
— *See* Wallis, Ellis, Suh, and Pfenninger.
Epel, D. *See* Zimmerberg, Sardet, and Epel.
Eppenberger, H. M. *See* Grove, Cerny, Perriard, and Eppenberger.
Etlinger, J. D. *See* Silver and Etlinger.
Euteneuer, U., and Schliwa, M. Evidence for an involvement of actin in the positioning and motility of centrosomes. 96.
Evans, W. H. *See* Zervos, Hope, and Evans.

F

Fages, C. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Fairbairn, S., Gilbert, R., Ojakian, G., Schwimmer, R., and Quigley, J. P. The extracellular matrix of normal chick embryo fibroblasts: its effect on transformed chick fibroblasts and its proteolytic degradation by the transformants. 1790.
Featherstone, C., Griffiths, G., and Warren, G. Newly synthesized G protein of vesicular stomatitis virus is not transported to the Golgi complex in mitotic cells. 2036.
Feibig, M. L. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
Feinstein, M. B. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Feinstein, S. C. *See* Drubin, Feinstein, Shooter, and Kirschner.
Feltkamp, C. A. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Ferguson, J. E. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Fesce, R. *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
— *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
Fine, R. E. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
Finidori, J. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Fischman, D. A. *See* Shimizu, Dennis, Masaki, and Fischman.
Flint, M. H. *See* Gibson and Flint.
Fox, J. E. B. *See* Boyles, Fox, Phillips, and Stenberg.
Francis, G. R., and Waterston, R. H. Muscle organization in *Caenorhabditis elegans*: localization of proteins implicated in thin filament attachment and I-band organization. 1532.
Franke, W. W. *See* Cowin, Kapprell, and Franke.
— *See* Hatzfeld and Franke.
Frankfurter, A. *See* Binder, Frankfurter, and Rebhun.
Fransen, J. A. M. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Frazier, W. A. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
Fredericks, W. J. *See* Tank, Fredericks, Barak, and Webb.
Friedlander, D. R., Brackenbury, R., and Edelman, G. M. Conversion of embryonic form to adult forms of N-CAM in vitro results from *de novo* synthesis of adult forms. 412.
—, Brackenbury, R., and Edelman, G. M. Correction. 1629.
Friesel, R. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois,

Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
— *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Fristrom, D. *See* Doctor, Fristrom, and Fristrom.
Fristrom, J. W. *See* Doctor, Fristrom, and Fristrom.
Fryer, P. R. *See* Ratcliffe, Fryer, and Hardingham.
Fuchs, E. *See* Glass, Kim, and Fuchs.
Fujii, D. K. *See* Lander, Fujii, and Reichardt.
Fujiki, Y. *See* Alexson, Fujiki, Shio, and Lazarow.
Fuller, G. M., Otto, J. M., Woloski, B. M., McGary, C. T., and Adams, M. A. The effects of hepatocyte stimulating factor on fibrinogen biosynthesis in hepatocyte monolayers. 1481.
Fuller, M. T. *See* Piperno and Fuller.
Fuller, S. D. *See* Pfeiffer, Fuller, and Simons.
Furcht, L. T. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.

G

Gabel, C. A., and Bergmann, J. E. Processing of the asparagine-linked oligosaccharides of secreted and intracellular forms of the vesicular stomatitis virus G protein: in vivo evidence of Golgi apparatus compartmentalization. 460.
Galvin, N. J., Dixit, V. M., O'Rourke, K. M., Santoro, S. A., Grant, G. A., and Frazier, W. A. Mapping of epitopes for monoclonal antibodies against human platelet thrombospondin with electron microscopy and high sensitivity amino acid sequencing. 1434.
Gambino, J. *See* May, Gambino, Weatherbee, and Morris.
— *See* Weatherbee, May, Gambino, and Morris.
Garbers, D. L. *See* Ward, Brokaw, Garbers, and Vacquier.
Garrido, J. *See* Brandan, Maldonado, Garrido, and Inestrosa.
Geiger, B., Volk, T., and Volberg, T. Molecular heterogeneity of adherens junctions. 1523.
Gelboin, H. V. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Gerrard, J. M. *See* Wheeler, Gerrard, and Carroll.
Geuze, H. J., Slot, J. W., Strous, G. J. A. M., Hasilik, A., and von Figura, K. Possible pathways for lysosomal enzyme delivery. 2253.
Ghosh, P. C., Wellner, R. B., Cragoe, E. J., Jr., and Wu, H. C. Enhancement of ricin cytotoxicity in Chinese hamster ovary cells by depletion of intracellular K^+: evidence for an Na^+/H^+ exchange system in Chinese hamster ovary cells. 350.
Gibbons, B. H., Tang, W.-J. Y., and Gibbons, I. R. Organic anions stabilize the reactivated motility of sperm flagella and the latency of dynein 1 ATPase activity. 1281.
Gibbons, I. R. *See* Gibbons, Tang, and Gibbons.
Gibson, G. J., and Flint, M. H. Type X collagen synthesis by chick sternal cartilage and its relationship to endochondral development. 277.
Gilbert, R. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
Gimenez-Gallego, G. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Giulian, D., and Baker, T. J. Peptides released by ameboid microglia regulate astroglial proliferation. 2411.
Glaser, L. *See* Lathrop, Thomas, and Glaser.
— *See* Ratner, Bunge, and Glaser.
Glass, C., Kim, K. H., and Fuchs, E. Sequence and expression of a human type II mesothelial keratin. 2366.
Glenney, J. R., Jr. *See* Bourguignon, Suchard, Nagpal, and Glenney.
Gliniak, B. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.
Gluzman, I. Y. *See* Krogstad, Schlesinger, and Gluzman.
Goetz, J. D. *See* Grinstein, Cohen, Goetz, and Rothstein.
Goldman, R. D. *See* Jones and Goldman.
— *See* Lieska, Yang, and Goldman.
Gonzalez, A. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.
Goodenough, D. A. *See* Miller and Goodenough.
Goodenough, U. W., and Heuser, J. E. The *Chlamydomonas* cell wall and its constituent glycoproteins analyzed by the quick-freeze, deep-etch technique. 1550.
—, Adair, W. S., Collin-Osdoby, P., and Heuser, J. E. Structure of the *Chlamydomonas* agglutinin and related flagellar surface proteins in vitro and in situ. 924.
— *See* Sale, Goodenough, and Heuser.
Goodman, S. L. *See* Behrens, Birchmeier, Goodman, and Imhof.
Gordon, J. S. *See* Winter, Levy, and Gordon.
— *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Goridis, C. *See* Pollerberg, Sadoul, Goridis, and Schachner.
— *See* Williams, Goridis, and Akeson.
Gottlieb, R. A., and Murphy, D. B. Analysis of the microtubule-binding domain of MAP-2. 1782.
Goud, B. *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Goyette, R. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Grainger, R. M. *See* Winkles and Grainger.
Grant, G. A. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
Grasser, W. A. *See* Rothwell, Grasser, and Murphy.
Greene, L. A. *See* Burstein, Seeley, and Greene.
Greer, K., Maruta, H., L'Hernault, S. W., and Rosenbaum, J. L. Alpha-tubulin acetylase activity in isolated *Chlamydomonas* flagella. 2081.
Greggs, R. *See* Horwitz, Duggan, Greggs, Decker, and Buck.
Griffin, J. W. *See* Hoffman, Thompson, Griffin, and Price.
Griffith, L. C. *See* Nose, Griffith, and Schulman.
Griffiths, G., Pfeiffer, S., Simons, K., and Matlin, K. Exit of newly synthesized membrane proteins from the *trans* cisterna of the Golgi complex to the plasma membrane. 949.
— *See* Featherstone, Griffiths, and Warren.
Grinstein, S., Cohen, S., Goetz, J. D., and Rothstein, A. Osmotic and phorbol ester–induced activation of Na^+/H^+ exchange: possible role of protein phosphorylation in lymphocyte volume regulation. 269.
Grohovaz, F. *See* Torri-Tarelli, Grohovaz, Fesce, and Ceccarelli.
Grøndahl-Hansen, J. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Grove, B. K., Cerny, L., Perriard, J.-C., and Eppenberger, H. M. Myomesin and M-protein: expression of two M-band proteins in pectoral muscle and heart during development. 1413.
Grumet, M. *See* Reiger, Grumet, and Edelman.
Grund, C. *See* Wiedenmann, Lawley, Grund, and Branton.
Grupp, S. A., Lieberman, M. A., and Harmony, J. A. K. Inhibition of lymphocyte proliferation by detergent-solubilized mouse liver membranes. 380.

H

Hadley, M. A., Byers, S. W., Suárez-Quian, C. A., Kleinman, H. K., and Dym, M. Extracellular matrix regulates Sertoli cell differentiation, testicular cord formation, and germ cell development in vitro. 1511.
Haggerty, J. G. *See* Jackson, Ward, and Haggerty.
— *See* Jackson, Ward, and Haggerty.
Haimann, C., Torri-Tarelli, F., Fesce, R., and Ceccarelli, B. Measurement of quantal secretion induced by ouabain and its correlation with depletion of synaptic vesicles. 1953.
Handler, J. S. *See* Turner, Thompson, Sariban-Sohraby, and Handler.
Hardingham, T. E. *See* Ratcliffe, Fryer, and Hardingham.
Harland, R., and Weintraub, H. Translation of mRNA injected into *Xenopus* oocytes is specifically inhibited by antisense RNA. 1094.
Harmony, J. A. K. *See* Grupp, Lieberman, and Harmony.
Hart, G. W. *See* Williams, Swiedler, and Hart.
Hasilik, A. *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Schulze-Lohoff, Hasilik, and von Figura.
Hasty, D. L. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.
Hatzfeld, M., and Franke, W. W. Pair formation and promiscuity of cytokeratins: formation in vitro of heterotypic complexes and intermediate-sized filaments by homologous and heterologous recombinations of purified polypeptides. 1826.
Hauri, H.-P., Sterchi, E. E., Bienz, D., Fransen, J. A. M., and Marxer, A. Expression and intracellular transport of microvillus

membrane hydrolases in human intestinal epithelial cells. 838.
Hayashi, M. *See* Katow and Hayashi.
Heasman, J. *See* Colman, Jones, and Heasman.
Heidemann, S. R. *See* Joshi, Chu, Buxbaum, and Heidemann.
Helenius, A. *See* Doxsey, Sambrook, Helenius, and White.
— *See* Kielian and Helenius.
Hendry, K. A. K. *See* Tucker, Mathews, Hendry, Mackie, and Roche.
Herman, I. M., and D'Amore, P. A. Microvascular pericytes contain muscle and nonmuscle actins. 43.
Heuser, J. E. *See* Goodenough and Heuser.
— *See* Goodenough, Adair, Collin-Osdoby, and Heuser.
Heuser, J. E. *See* Sale, Goodenough, and Heuser.
Hic, S. *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Higashi-Fujime, S. Unidirectional sliding of myosin filaments along the bundle of F-actin filaments spontaneously formed during superprecipitation. 2335.
Higgins, D. *See* Johnson, Paik, and Higgins.
Higuchi, H. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Hille, A. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Hino, Y. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Hirokawa, N., Bloom, G. S., and Vallee, R. B. Cytoskeletal architecture and immunocytochemical localization of microtubule-associated proteins in regions of axons associated with rapid axonal transport: the β,β'-iminodipropionitrile-intoxicated axon as a model system. 227.
—, **Takemura, R., and Hisanaga, S.-I.** Cytoskeletal architecture of isolated mitotic spindle with special reference to microtubule-associated proteins and cytoplasmic dynein. 1858.
Hisanaga, S.-I. *See* Hirokawa, Takemura, and Hisanaga.
Hoff, M. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
Hoffman, P. N., Thompson, G. W., Griffin, J. W., and Price, D. L. Changes in neurofilament transport coincide temporally with alterations in the caliber of axons in regenerating motor fibers. 1332.
Hoffmann, W. *See* Bernstein, Hoffmann, Ammerer, and Schekman.
Holbrook, K. A. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
Hope, J. *See* Zervos, Hope, and Evans.
Hoppe, C. A., Connolly, T. P., and Hubbard, A. L. Transcellular transport of polymeric IgA in the rat hepatocyte: biochemical and morphological characterization of the transport pathway. 2113.
Horwitz, A., Duggan, K., Greggs, R., Decker, C., and Buck, C. The CSAT antigen has properties of a receptor for laminin and fibronectin. 2134.
Howard, T. H., and Oresajo, C. O. The kinetics of chemotactic peptide–induced change in F-actin content, F-actin distribution, and the shape of neutrophils. 1078.
Howe, C. L., Sacramone, L. M., Mooseker, M. S., and Morrow, J. S. Mechanisms of cytoskeletal regulation: modulation of membrane affinity in avian brush border and erythrocyte spectrins. 1379.
Howlett, S. K. *See* Maro, Howlett, and Webb.
Huang, L. *See* Connor and Huang.
Hubbard, A. L. *See* Hoppe, Connolly, and Hubbard.
— *See* Wall and Hubbard.
Huisman, H. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Humphries, M. J. *See* Nagata, Humphries, Olden, and Yamada.
Hung, J. T. *See* Cardell, Michaels, Hung, and Cardell.
Huttner, W. B. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Hyatt, H. *See* Primakoff, Hyatt, and Myles.
Hyman, C., and Pfenninger, K. H. Intracellular regulators of neuronal sprouting: calmodulin-binding proteins of nerve growth cones. 1153.

I

Iacopetta, B. *See* Carpentier, Brown, Iacopetta, and Orci.
Imam, S. H., Buchanan, M. J., Shin, H.-C., and Snell, W. J. The *Chlamydomonas* cell wall: characterization of the wall framework. 1599.
Imhof, B. A. *See* Behrens, Birchmeier, Goodman, and Imhof.
Inestrosa, N. C. *See* Brandan, Maldonado, Garrido, and Inestrosa.
Irwin, M. H., Silvers, S. H., and Mayne, R. Monoclonal antibody against chicken type IX collagen: preparation, characterization, and recognition of the intact form of type IX collagen secreted by chondrocytes. 814.
Israel, M. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
Ivanov, I. E. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.

J

Jackson, R. C., Ward, K. K., and Haggerty, J. G. Mild proteolytic digestion restores exocytotic activity to *N*-ethylmaleimide-inactivated cell surface complex from sea urchin eggs. 6.
—, **Ward, K. K., and Haggerty, J. G.** Correction 1167.
— *See* Crabb and Jackson.
Jacques, Y. V. *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
Jalkanen, M., Nguyen, H., Rapraeger, A., Kurn, N., and Bernfield, M. Heparan sulfate proteoglycans from mouse mammary epithelial cells: localization on the cell surface with a monoclonal antibody. 976.
Jarvik, J. W. *See* Wright, Salisbury, and Jarvik.
Jentoft, J. E., and Town, C. D. Intracellular pH in *Dictyostelium discoideum*: a ^{31}P nuclear magnetic resonance study. 778.
Jessen, K. R., Morgan, L., Brammer, M., and Mirsky, R. Galactocerebroside is expressed by non-myelin-forming Schwann cells in situ. 1135.
Job, D., Pabion, M., and Margolis, R. L. Generation of microtubule stability subclasses by microtubule-associated proteins: implications for the microtubule "dynamic instability" model. 1680.
Johnson, E. M., Jr. *See* DiStefano, Schweitzer, Taniuchi, and Johnson.
— *See* Taniuchi and Johnson.
Johnson, M. I., Paik, K., and Higgins, D. Rapid changes in synaptic vesicle cytochemistry after depolarization of cultured cholinergic sympathetic neurons. 217.
Johnson, W. *See* Schreiber, Kenney, Kowalski, Thomas, Giminez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Johnstone, R. M. *See* Pan, Teng, Wu, Adam, and Johnstone.
Jones, A. L. *See* Caron, Jones, and Kirschner.
Jones, E. A. *See* Colman, Jones, and Heasman.
Jones, J. C. R., and Goldman, R. D. Intermediate filaments and the initiation of desmosome assembly. 506.
Jones, L. N., and Pope, F. M. Isolation of intermediate filament assemblies from human hair follicles. 1569.
Jorgensen, A. O., Shen, A. C.-Y., and Campbell, K. P. Ultrastructural localization of calsequestrin in adult rat atrial and ventricular muscle cells. 257.
Joseph, S. K. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Joshi, H. C., Chu, D., Buxbaum, R. E., and Heidemann, S. R. Tension and compression in the cytoskeleton of PC 12 neurites. 697.
Jovin, T. M. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.
Jungmann, R. A. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.

K

Kabat, D., Gliniak, B., Rohrschneider, L., and Polonoff, E. Cell anchorage determines whether mammary tumor virus glycoproteins are processed for plasma membranes or secretion. 2274.
Kabat, E. A. *See* Sung, Kabat, and Chien.
— *See* Sung, Kabat, and Chien.
Kabcenell, A. K., and Atkinson, P. H. Processing of the rough endoplasmic reticulum membrane glycoproteins of rotavirus SA11. 1270.
Kao, W.-Y., and Case, S. T. A novel giant secretion polypeptide in

Chironomus salivary glands: implications for another Balbiani ring gene. 1044.
Kaplan, A. *See* Wood and Kaplan.
Kaplan, J., McVey Ward, D., and Wiley, H. S. Phenylarsine oxide–induced increase in alveolar macrophage surface receptors: evidence for fusion of internal receptor pools with the cell surface. 121.
Kaplan, M. R., and Simoni, R. D. Intracellular transport of phosphatidylcholine to the plasma membrane. 441.
—, and Simoni, R. D. Transport of cholesterol from the endoplasmic reticulum to the plasma membrane. 446.
Kapprell, H.-P. *See* Cowin, Kapprell, and Franke.
Karnovsky, M. J. *See* Robinson, Badwey, Karnovsky, and Karnovsky.
Karnovsky, M. L. *See* Robinson, Badwey, Karnovsky, and Karnovsky.
Katow, H., and Hayashi, M. Role of fibronectin in primary mesenchyme cell migration in the sea urchin. 1487.
Kelly, R. B. *See* Burgess, Craik, and Kelly.
— *See* Moore and Kelly.
— *See* Schroer, Brady, and Kelly.
— *See* Schweitzer and Kelly.
Kenney, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Kensler, R. W., Levine, R. J. C., and Stewart, M. Electron microscopic and optical diffraction analysis of the structure of scorpion muscle thick filaments. 395.
— *See* Stewart, Kensler, and Levine.
Kielian, M., and Helenius, A. pH-Induced alterations in the fusogenic spike protein of Semliki Forest virus. 2284.
Kim, K. H. *See* Glass, Kim, and Fuchs.
Kimball, J. R. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
Kimura, S. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Kirkland, B. *See* Kistler, Kirkland, and Bullivant.
Kirschner, M. W. *See* Caron, Jones, and Kirschner.
— *See* Drubin, Feinstein, Shooter, and Kirschner.
— *See* Mitchison and Kirschner.
Kistler, J., Kirkland, B., and Bullivant, S. Identification of a 70,000-D protein in lens membrane junctional domains. 28.
Kleinman, H. K. *See* Hadley, Byers, Suárez-Quian, Kleinman, and Dym.
Knight, D. M. *See* Chapman, Knight, and Ringold.
Knudsen, K. A. The calcium-dependent myoblast adhesion that precedes cell fusion is mediated by glycoproteins. 891.
Korn, H. *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Kowalski, J. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Krishan, A. *See* Quillen, Castello, Krishan, and Rubin.
Kristensen, P., Nielsen, L. S., Grøndahl-Hansen, J., Andresen, P. B., Larsson, L.-I., and Danø, K. Immunocytochemical demonstration of tissue-type plasminogen activator in endocrine cells of the rat pituitary gland. 305.
Krogstad, D. J., Schlesinger, P. H., and Gluzman, I. Y. Antimalarials increase vesicle pH in *Plasmodium falciparum*. 2302.
Krueger, C. M. *See* Neufeld, Majerus, Krueger, and Saffitz.
Kuettel, M. R., Squinto, S. P., Kwast-Welfeld, J., Schwoch, G., Schweppe, J. S., and Jungmann, R. A. Localization of nuclear subunits of cyclic AMP–dependent protein kinase by the immunocolloidal gold method. 965.
Kuriyama, R., and Borisy, G. G. Identification of molecular components of the centrosphere in the mitotic spindle of sea urchin eggs. 524.
Kurn, N. *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.
Kuwano, M. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Kuypers, F. A. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
Kwast-Welfeld, J. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.

L

LaCorbiere, M. *See* Schubert and LaCorbiere.
Lambert, A.-M. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Lander, A. D., Fujii, D. K., and Reichardt, L. F. Purification of a factor that promotes neurite outgrowth: isolation of laminin and associated molecules. 898.
Landreth, G. E., Williams, L. K., and McCutchen, C. Wheat germ agglutinin blocks the biological effects of nerve growth factor. 1690.
Landreth, G. E., Williams, L. K., and Rieser, G. D. Association of the epidermal growth factor receptor kinase with the detergent-insoluble cytoskeleton of A431 cells. 1341.
Landry, J., Bernier, D., Ouellet, C., Goyette, R., and Marceau, N. Spheroidal aggregate culture of rat liver cells: histotypic reorganization, biomatrix deposition, and maintenance of functional activities. 914.
Lanni, F. *See* Luby-Phelps, Lanni, and Taylor.
Larsson, L.-I. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Lasek, R. J. *See* Miller and Lasek.
Lathrop, B., Thomas, K., and Glaser, L. Control of myogenic differentiation by fibroblast growth factor is mediated by position in the G_1 phase of the cell cycle. 2194.
Lawley, K. *See* Wiedenmann, Lawley, Grund, and Branton.
Lazarow, P. B. *See* Alexson, Fujiki, Shio, and Lazarow.
Lazereg, S. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.
Lee, M. G.-S. *See* Lewis, Lee, and Cowan.
Lee, R. W. H. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Levine, R. J. C. *See* Kensler, Levine, and Stewart.
— *See* Stewart, Kensler, and Levine.
Levy, D. *See* Winter, Levy, and Gordon.
Lewis, B. H. *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.
Lewis, S. A., Lee, M. G.-S., and Cowan, N. J. Five mouse tubulin isotypes and their regulated expression during development. 852.
L'Hernault, S. W. *See* Greer, Maruta, L'Hernault, and Rosenbaum.
Lieberman, M. A. *See* Grupp, Lieberman, and Harmony.
Liem, R. K. H. *See* Napolitano, Pachter, Chin, and Liem.
— *See* Pachter and Liem.
Lieska, N., Yang, H.-Y., and Goldman, R. D. Purification of the 300K intermediate filament–associated protein and its in vitro recombination with intermediate filaments. 802.
Lin, M. *See* Roth, Lin, and Prescott.
Lingappa, V. R. *See* Perara and Lingappa.
Linneman, D. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.
Litoff, D. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Little, C. D. *See* Chen and Little.
Lloyd, C. W. *See* Clayton, Black, and Lloyd.
Lohka, M. J., and Maller, J. L. Induction of nuclear envelope breakdown, chromosome condensation, and spindle formation in cell-free extracts. 518.
Lopez, L. C., Bayna, E. M., Litoff, D., Shaper, N. L., Shaper, J. H., and Shur, B. D. Receptor function of mouse sperm surface galactosyltransferase during fertilization. 1501.
Loret, C. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Louvard, D. *See* Baron, Neff, Louvard, and Courtoy.
— *See* Moya, Dautry-Varsat, Goud, Louvard, and Boquet.
Low, R. B., Woodcock-Mitchell, J., Mitchell, J. J., Arnold, J., and Absher, P. M. Synthesis of cytoskeletal and contractile proteins by cultured IMR-90 fibroblasts. 500.
Luby-Phelps, K., Lanni, F., and Taylor, D. L. Behavior of a fluorescent analogue of calmodulin in living 3T3 cells. 1245.
Luck, D. J. L. *See* Segal and Luck.
Lyall, R. M. *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.
Lyles, J. M. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.

M

Maciag, T. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.

— *See* Terranova, DiFlorio, Lyall, Hic, Friesel, and Maciag.

Mackie, J. B. *See* Tucker, Mathews, Hendry, Mackie, and Roche.

Madara, J. L., and Dharmsathaphorn, K. Occluding junction structure–function relationships in a cultured epithelial monolayer. 2124.

Mahan, J. T. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.

Maher, P. A., Cox, G. F., and Singer, S. J. Zeugmatin: a new high molecular weight protein associated with Z lines in adult and early embryonic striated muscle. 1871.

Majack, R. A., Cook, S. C., and Bornstein, P. Platelet-derived growth factor and heparin-like glycosaminoglycans regulate thrombospondin synthesis and deposition in the matrix by smooth muscle cells. 1059.

Majerus, P. W. *See* Maruyama, Bell, and Majerus.

— *See* Neufeld, Majerus, Krueger, and Saffitz.

Maldonado, M. *See* Brandan, Maldonado, Garrido, and Inestrosa.

Maller, J. L. *See* Lohka and Maller.

Manaranche, R. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.

Marceau, N. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.

Marder, V. J. *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.

Margolis, R. L. *See* Job, Pabion, and Margolis.

Maro, B., Howlett, S. K., and Webb, M. Non-spindle microtubule organizing centers in metaphase II–arrested mouse oocytes. 1665.

Marsal, J. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.

Maruta, H. *See* Greer, Maruta, L'Hernault, and Rosenbaum.

Maruyama, I., Bell, C. E., and Majerus, P. W. Thrombomodulin is found on endothelium of arteries, veins, capillaries, and lymphatics, and on syncytiotrophoblast of human placenta. 363.

Maruyama, K., Yoshioka, T., Higuchi, H., Ohashi, K., Kimura, S., and Natori, R. Connectin filaments link thick filaments and Z lines in frog skeletal muscle as revealed by immunoelectron microscopy. 2167.

Marxer, A. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.

Masaki, R. *See* Yamamoto, Masaki, and Tashiro.

Masaki, T. *See* Shimizu, Dennis, Masaki, and Fischman.

Mathews, S. A. *See* Tucker, Mathews, Hendry, Mackie, and Roche.

Matlin, K. *See* Griffiths, Pfeiffer, Simons, and Matlin.

May, G. S., Gambino, J., Weatherbee, J. A., and Morris, N. R. Identification and functional analysis of beta-tubulin genes by site specific integrative transformation in *Aspergillus nidulans*. 712.

— *See* Weatherbee, May, Gambino, and Morris.

Mayadas, T. *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.

Mayne, R. *See* Irwin, Silvers, and Mayne.

Mazie, J. C. *See* Morel, Marsal, Manaranche, Lazereg, Mazie, and Israel.

McCarthy, J. B. *See* Donaldson, Mahan, Hasty, McCarthy, and Furcht.

McCutchen, C. *See* Landreth, Williams, and McCutchen.

McEver, R. P. *See* Stenberg, McEver, Shuman, Jacques, and Bainton.

McGary, C. T. *See* Fuller, Otto, Woloski, McGary, and Adams.

McKenna, M. P. *See* McNeil, McKenna, and Taylor.

McKenna, N. M., Meigs, J. B., and Wang, Y.-L. Exchangeability of alpha-actinin in living cardiac fibroblasts and muscle cells. 2223.

McLaughlin, B. J. *See* Cooper, McLaughlin, Tallant, and Cheung.

McMahan, U. J. *See* Anglister and McMahan.

McManaman, J. *See* Smith, McManaman, and Appel.

McManaman, J. L. *See* Bursztajn, Berman, McManaman, and Watson.

McNeil, P. L., McKenna, M. P., and Taylor, D. L. A transient rise in cytosolic calcium follows stimulation of quiescent cells with growth factors and is inhibitable with phorbol myristate acetate. 372.

McVey Ward, D. *See* Kaplan, McVey Ward, and Wiley.

Mehlman, T. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.

Mehta, H., Orphe, C., Todd, M. S., Cornbrooks, C. J., and Carey, D. J. Synthesis by Schwann cells of basal lamina and membrane-associated heparan sulfate proteoglycans. 660.

Meigs, J. B. *See* McKenna, Meigs, and Wang.

Meleka, I. *See* Wall and Meleka.

Mesland, D. A. M. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.

Michaels, J. E. *See* Cardell, Michaels, Hung, and Cardell.

Mifune, K. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.

Miller, J. B., Crow, M. T., and Stockdale, F. E. Slow and fast myosin heavy chain content defines three types of myotubes in early muscle cell cultures. 1643.

Miller, R. H., and Lasek, R. J. Cross-bridges mediate anterograde and retrograde vesicle transport along microtubules in squid axoplasm. 2181.

Miller, T. M., and Goodenough, D. A. Gap junction structures after experimental alteration of junctional channel conductance. 1741.

Mirsky, R. *See* Jessen, Morgan, Brammer, and Mirsky.

Mitchell, J. J. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.

Mitchison, T. J., and Kirschner, M. W. Properties of the kinetochore in vitro. I. Microtubule nucleation and tubulin binding. 755.

—, and Kirschner, M. W. Properties of the kinetochore in vitro. II. Microtubule capture and ATP-dependent translocation. 766.

Moenner, M. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.

Møller, C. J. *See* Nybroe, Albrechtsen, Dahlin, Linneman, Lyles, Møller, and Bock.

Molski, T. F. P. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.

Moore, H.-P. H., and Kelly, R. B. Secretory protein targeting in a pituitary cell line: differential transport of foreign secretory proteins to distinct secretory pathways. 1773.

Mooseker, M. S. *See* Coleman and Mooseker.

— *See* Howe, Sacramone, Mooseker, and Morrow.

Morel, N., Marsal, J., Manaranche, R., Lazereg, S., Mazie, J. C., and Israel, M. Large-scale purification of presynaptic plasma membranes from *Torpedo marmorata* electric organ. 1757.

Morgan, L. *See* Jessen, Morgan, Brammer, and Mirsky.

Morris, N. R. *See* May, Gambino, Weatherbee, and Morris.

— *See* Weatherbee, May, Gambino, and Morris.

Morrow, J. S. *See* Howe, Sacramone, Mooseker, and Morrow.

Moya, M., Dautry-Varsat, A., Goud, B., Louvard, D., and Boquet, P. Inhibition of coated pit formation in HEP_2 cells blocks the cytotoxicity of diphtheria toxin but not that of ricin toxin. 548.

Mukherjee, T. K. *See* Banerjee, Mukherjee, and Redman.

Murphy, D. B. *See* Gottlieb and Murphy.

— *See* Rothwell, Grasser, and Murphy.

Murphy, T. L. *See* Chen, Murphy, Willingham, Pastan, and August.

Muscarella, D. E., Vogt, V. M., and Bloom, S. E. The ribosomal RNA gene cluster in aneuploid chickens: evidence for increased gene dosage and regulation of gene expression. 1749.

Myles, D. G. *See* Primakoff, Hyatt, and Myles.

N

Naccache, P. H. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.

Nachmias, V. T. *See* Philp and Nachmias.

Nadal-Ginard, B. *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.

Nagata, K., Humphries, M. J., Olden, K., and Yamada, K. M. Collagen can modulate cell interactions with fibronectin. 386.

Nagpal, M. L. *See* Bourguignon, Suchard, Nagpal, and Glenney.

Napolitano, E. W., Pachter, J. S., Chin, S. S. M., and Liem, R. K. H. β-Internexin, a ubiquitous intermediate filament–associated protein. 1323.
Natori, R. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Neff, L. *See* Baron, Neff, Louvard, and Courtoy.
Netland, P. A., and Zetter, B. R. Metastatic potential of B16 melanoma cells after in vitro selection for organ-specific adherence. 720.
Neufeld, E. J., Majerus, P. W., Krueger, C. M., and Saffitz, J. E. Uptake and subcellular distribution of [^{3}H]arachidonic acid in murine fibrosarcoma cells measured by electron microscope autoradiography. 573.
Nguyen, H. *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.
Nielsen, L. S. *See* Kristensen, Nielsen, Grøndahl-Hansen, Andresen, Larsson, and Danø.
Nose, P. S., Griffith, L. C., and Schulman, H. Ca^{2+}-dependent phosphorylation of tyrosine hydroxylase in PC12 cells. 1182.
Novikoff, A. B. *See* Novikoff, Touster, Novikoff, and Tulsiani.
Novikoff, P. M., Touster, O., Novikoff, A. B., and Tulsiani, D. P. Effects of swainsonine on rat liver and kidney: biochemical and morphological studies. 339.
Nuccitelli, R. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Nunez, J. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Nybroe, O., Albrechtsen, M., Dahlin, J., Linnemann, D., Lyles, J. M., Møller, C. J., and Bock, E. Biosynthesis of the neural cell adhesion molecule: characterization of polypeptide C. 2310.

O

Oakley, B. R., and Rinehart, J. E. Mitochondria and nuclei move by different mechanisms in *Aspergillus nidulans*. 2392.
O'Brien, T. G. *See* Sussman, Prettyman, and O'Brien.
Ochs, R. L. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
O'Connor, S. E. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Ohashi, K. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.
Ohnishi, S. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Ojakian, G. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.
Olden, K. *See* Nagata, Humphries, Olden, and Yamada.
Oliver, J. M., Seagrave, JC., Pfeiffer, J. R., Feibig, M. L., and Deanin, G. G. Surface functions during mitosis in rat basophilic leukemia cells. 2156.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Omann, G. M. *See* Sklar, Omann, and Painter.
Ono, M., Mifune, K., Yoshimura, A., Ohnishi, S., and Kuwano, M. Monensin-resistent mouse Balb/3T3 cell mutant with aberrant penetration of vesicular stomatitis virus. 60.
Op den Kamp, J. A. F. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
Orci, L. *See* Carpentier, Brown, Iacopetta, and Orci.
Oresajo, C. O. *See* Howard and Oresajo.
O'Rourke, K. M. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.
Orphe, C. *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Osborn, M. *See* Bartnik, Osborn, and Weber.
Otto, J. M. *See* Fuller, Otto, Woloski, McGary, and Adams.
Ouellet, C. *See* Landry, Bernier, Ouellet, Goyette, and Marceau.
Owaribe, K., and Eguchi, G. Increase in actin contents and elongation of apical projections in retinal pigmented epithelial cells during development of the chicken eye. 590.
Owen, N. E. Effect of TPA on ion fluxes and DNA synthesis in vascular smooth muscle cells. 454.

P

Pabion, M. *See* Job, Pabion, and Margolis.
Pachter, J. S., and Liem, R. K. H. α-Internexin, a 66-kD intermediate filament–binding protein from mammalian central nervous tissues. 1316.
— *See* Napolitano, Pachter, Chin, and Liem.
Paik, K. *See* Johnson, Paik, and Higgins.
Painter, R. G. *See* Sklar, Omann, and Painter.
Paintrand, M. *See* Tassin, Paintrand, Berger, and Bornens.
Palade, G. E. *See* Peters, Carley, and Palade.
Palatnik, C. M. *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Pan, B.-T., Teng, K., Wu, C., Adam, M , and Johnstone, R. M. Electron microscopic evidence for externalization of the transferrin receptor in vesicular form in sheep reticulocytes. 942.
Park, S. S. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Pastan, I. *See* Chen, Murphy, Willingham, Pastan, and August.
Pearson, C. B. *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.
Perara, E., and Lingappa, V. R. A former amino terminal signal sequence engineered to an internal location directs translocation of both flanking protein domains. 2292.
Periasamy, M. *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Perriard, J.-C. *See* Grove, Cerny, Perriard, and Eppenberger.
Peters, K.-R., Carley, W. W., and Palade, G. E. Endothelial plasmalemmal vesicles have a characteristic striped bipolar surface structure. 2233.
Peterson, P. A. *See* Severinsson and Peterson.
Pfeiffer, F. *See* Triller, Cluzeaud, Pfeiffer, Betz, and Korn.
Pfeiffer, J. R., Seagrave, JC., Davis, B. H., Deanin, G. G., and Oliver, J. M. Membrane and cytoskeletal changes associated with IgE-mediated serotonin release from rat basophilic leukemia cells. 2145.
— *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
Pfeiffer, S., Fuller, S. D., and Simons, K. Intracellular sorting and basolateral appearance of the G protein of vesicular stomatitis virus in Madin-Darby canine kidney cells. 470.
— *See* Griffiths, Pfeiffer, Simons, and Matlin.
Pfenninger, K. H. *See* Ellis, Wallis, Abreu, and Pfenninger.
— *See* Hyman and Pfenninger.
— *See* Wallis, Ellis, Suh, and Pfenninger.
Phillips, D. R. *See* Boyles, Fox, Phillips, and Stenberg.
Philp, N. J., and Nachmias, V. T. Components of the cytoskeleton in the retinal pigmented epithelium of the chick. 358.
Picquot, P. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Piperno, G., and Fuller, M. T. Monoclonal antibodies specific for an acetylated form of α-tubulin recognize the antigen in cilia and flagella from a variety of organisms. 2085.
Pittenger, M. F., and Cleveland, D. W. Retention of autoregulatory control of tubulin synthesis in cytoplasts: demonstration of a cytoplasmic mechanism that regulates the level of tubulin expression. 1941.
Plattner, H. *See* Zieseniss and Plattner.
Pollack, L., and Atkinson, P. H. Correction. 1627.
Pollerberg, E. G., Sadoul, R., Goridis, C., and Schachner, M. Selective expression of the 180-kD component of the neural cell adhesion molecule N-CAM during development. 1921.
Polonoff, E. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.
Pope, F. M. *See* Jones and Pope.
Porter-Jordan, K. *See* Benson, Porter-Jordan, Buoniconti, and Fine.
Poruchynsky, M. S., Tyndall, C., Both, G. W., Sato, F., Bellamy, A. R., and Atkinson, P. H. Deletions into an NH_2-terminal hydrophobic domain result in secretion of rotavirus VP7, a resident endoplasmic reticulum membrane glycoprotein. 2199.
Prescott, D. M. *See* Roth, Lin, and Prescott.
Preston, S. F., Regula, C. S., Sager, P. R., Pearson, C. B., Daniels, L. S., Brown, P. A., and Berlin, R. D. Glycosaminoglycan synthesis is depressed during mitosis and elevated during early G1. 1086.
Preston, Y. A. *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Prettyman, R. *See* Sussman, Prettyman, and O'Brien.
Price, D. L. *See* Hoffman, Thompson, Griffin, and Price.
Primakoff, P., Hyatt, H., and Myles, D. G. A role for the migrating sperm surface antigen PH-20 in guinea pig sperm binding to the egg zona pellucida. 2239.

Q

Quigley, J. P. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.

Quillen, M., Castello, C., Krishan, A., and Rubin, R. W. Cell surface tubulin in leukemic cells: molecular structure, surface binding, turnover, cell cycle expression, and origin. 2345.

R

Rapraeger, A. *See* Jalkanen, Nguyen, Rapraeger, Kurn, and Bernfield.

Ratcliffe, A., Fryer, P. R., and Hardingham, T. E. Proteoglycan biosynthesis in chondrocytes: protein A–gold localization of proteoglycan protein core and chondroitin sulfate within Golgi subcompartments. 2355.

— *See* Zanetti, Ratcliffe, and Watt.

Ratner, N., Bunge, R. P., and Glaser, L. A neuronal cell surface heparan sulfate proteoglycan is required for dorsal root ganglion neuron stimulation of Schwann cell proliferation. 744.

Rebhun, L. I. *See* Binder, Frankfurter, and Rebhun.

Redman, C. M. *See* Banerjee, Mukherjee, and Redman.

Reeder, R. H. Mechanisms of nucleolar dominance in animals and plants. 2013.

Reedy, M. C. *See* Schachat, Canine, Briggs, and Reedy.

Reese, T. S. *See* Cheng and Reese.

Regula, C. S. *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.

Reichardt, L. F. *See* Lander, Fujii, and Reichardt.

Reiger, F., Grumet, M., and Edelman, G. M. N-CAM at the vertebrate neuromuscular junction. 285.

Rieser, G. D. *See* Landreth, Williams, and Rieser.

Rinehart, J. E. *See* Oakley and Rinehart.

Ringold, G. M. *See* Chapman, Knight, and Ringold.

Rios-Candelore, M. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois, Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.

Rizzolo, L. J., Finidori, J., Gonzalez, A., Arpin, M., Ivanov, I. E., Adesnik, M., and Sabatini, D. D. Biosynthesis and intracellular sorting of growth hormone–viral envelope glycoprotein hybrids. 1351.

Robert-Nicoud, M. *See* Arndt-Jovin, Robert-Nicoud, Baurschmidt, and Jovin.

Robinson, J. M., Badwey, J. A., Karnovsky, M. L., and Karnovsky, M. J. Release of superoxide and change in morphology by neutrophils in response to phorbol esters: antagonism by inhibitors of calcium-binding proteins. 1052.

Robinson, K. R. The responses of cells to electrical fields: a review. 2023.

Roche, D. L. J. *See* Tucker, Mathews, Hendry, Mackie, and Roche.

Roelofsen, B. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.

Rogalski, A. A., and Singer, S. J. An integral glycoprotein associated with the membrane attachment sites of actin microfilaments. 785.

Rohrschneider, L. *See* Kabat, Gliniak, Rohrschneider, and Polonoff.

Rolland, B. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.

Roos, D. S., and Choppin, P. W. Biochemical studies on cell fusion. I. Lipid composition of fusion-resistant cells. 1578.

—, and Choppin, P. W. Biochemical studies on cell fusion. II. Control of fusion response by lipid alterations. 1591.

Roos, E., Spiele, H., Feltkamp, C. A., Huisman, H., Wiegant, F. A. C., Traas, J., and Mesland, D. A. M. Localization of cell surface glycoproteins in membrane domains associated with the underlying filament network. 1817.

Rosa, P., Hille, A., Lee, R. W. H., Zanini, A., De Camilli, P., and Huttner, W. B. Secretogranins I and II: two tyrosine-sulfated secretory proteins common to a variety of cells secreting peptides by the regulated pathway. 1999.

Rosenbaum, J. L. *See* Greer, Maruta, L'Hernault, and Rosenbaum.

Roth, M., Lin, M., and Prescott, D. M. Large scale synchronous mating and the study of macronuclear development in *Euplotes crassus*. 79.

Rothman, J. E. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.

Rothstein, A. *See* Grinstein, Cohen, Goetz, and Rothstein.

Rothwell, S. W., Grasser, W. A., and Murphy, D. B. Direct observation of microtubule treadmilling by electron microscopy. 1637.

Rubin, R. W. *See* Quillen, Castello, Krishan, and Rubin.

Rutishauser, U., Watanabe, M., Silver, J., Troy, F. A., and Vimr, E. R. Specific alteration of NCAM-mediated adhesion by an endoneuraminidase. 1842.

S

Sabatini, D. D. *See* Rizzolo, Finidori, Gonzalez, Arpin, Ivanov, Adesnik, and Sabatini.

Sacramone, L. M. *See* Howe, Sacramone, Mooseker, and Morrow.

Sadoul, R. *See* Pollerberg, Sadoul, Goridis, and Schachner.

Saffitz, J. E. *See* Neufeld, Majerus, Krueger, and Saffitz.

Sager, P. R. *See* Preston, Regula, Sager, Pearson, Daniels, Brown, and Berlin.

Sale, W. S., Goodenough, U. W., and Heuser, J. E. The substructure of isolated and in situ outer dynein arms of sea urchin sperm flagella. 1400.

Salisbury, J. *See* Wright, Salisbury, and Jarvik.

Sambrook, J. *See* Doxsey, Sambrook, Helenius, and White.

Santoro, S. A. *See* Galvin, Dixit, O'Rourke, Santoro, Grant, and Frazier.

Sardet, C. *See* Zimmerberg, Sardet, and Epel.

Sariban-Sohraby, S. *See* Turner, Thompson, Sariban-Sohraby, and Handler.

Sato, F. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.

Schachat, F. H., Canine, A. C., Briggs, M. M., and Reedy, M. C. The presence of two skeletal muscle α-actinins correlates with troponin–tropomyosin expression and Z-line width. 1001.

Schachner, M. *See* Pollerberg, Sadoul, Goridis, and Schachner.

Schekman, R. *See* Bernstein, Hoffmann, Ammerer, and Schekman.

Schlesinger, P. H. *See* Krogstad, Schlesinger, and Gluzman.

Schliwa, M. *See* Euteneuer and Schliwa.

Schneider, M. D., Sellers, J. R., Vahey, M., Preston, Y. A., and Adelstein, R. S. Localization and topography of antigenic domains within the heavy chain of smooth muscle myosin. 66.

Schreiber, A. B., Kenney, J., Kowalski, J., Thomas, K. A., Gimenez-Gallego, G., Rios-Candelore, M., Di Salvo, J., Barritault, D., Courty, J., Courtois, Y., Moenner, M., Loret, C., Burgess, W. H., Mehlman, T., Friesel, R., Johnson, W., and Maciag, T. A unique family of endothelial cell polypeptide mitogens: the antigenic and receptor cross-reactivity of bovine endothelial cell growth factor, brain-derived acidic fibroblast growth factor, and eye-derived growth factor-II. 1623.

Schroer, T. A., Brady, S. T., and Kelly, R. B. Fast axonal transport of foreign synaptic vesicles in squid axoplasm. 568.

Schubert, D., and LaCorbiere, M. Isolation of an adhesion-mediating protein from chick neural retina adherons. 1071.

Schulman, H. *See* Nose, Griffith, and Schulman.

Schulze-Lohoff, E., Hasilik, A., and von Figura, K. Cathepsin D precursors in clathrin-coated organelles from human fibroblasts. 824.

Schwartz, A. L. *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.

Schweitzer, E. S., and Kelly, R. B. Selective packaging of human growth hormone into synaptic vesicles in a rat neuronal (PC12) cell line. 667.

Schweitzer, J. B. *See* DiStefano, Schweitzer, Taniuchi, and Johnson.

Schweppe, J. S. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.

Schwimmer, R. *See* Fairbairn, Gilbert, Ojakian, Schwimmer, and Quigley.

Schwoch, G. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.

Seagrave, JC. *See* Oliver, Seagrave, Pfeiffer, Feibig, and Deanin.
— *See* Pfeiffer, Seagrave, Davis, Deanin, and Oliver.
Seeley, P. J. *See* Burstein, Seeley, and Greene.
Segal, R. A., and Luck, D. J. L. Phosphorylation in isolated *Chlamydomonas* axonemes: a phosphoprotein may mediate the Ca^{2+}-dependent photophobic response. 1702.
Sellers, J. R., Spudich, J. A., and Sheetz, M. P. Light chain phosphorylation regulates the movement of smooth muscle myosin on actin filaments. 1897.
— *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Severinsson, L., and Peterson, P. A. Abrogation of cell surface expression of human class I transplantation antigens by an adenovirus protein in *Xenopus laevis* oocytes. 540.
Sha'afi, R. I. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Shaper, J. H. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Shaper, N. L. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Shear, C. R., and Bloch, R. J. Vinculin in subsarcolemmal densities in chicken skeletal muscle: localization and relationship to intracellular and extracellular structures. 240.
Sheetz, M. P. *See* Sellers, Spudich, and Sheetz.
Shefcyk, J. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Shen, A. C.-Y. *See* Jorgensen, Shen, and Campbell.
Shen, S. S., and Burgart, L. J. Intracellular sodium activity in the sea urchin egg during fertilization. 420.
Shimizu, T., Dennis, J. E., Masaki, T., and Fischman, D. A. Axial arrangement of the myosin rod in vertebrate thick filaments: immunoelectron microscopy with a monoclonal antibody to light meromyosin. 1115.
Shin, H.-C. *See* Imam, Buchanan, Shin, and Snell.
Shio, H. *See* Alexson, Fujiki, Shio, and Lazarow.
Shooter, E. M. *See* Drubin, Feinstein, Shooter, and Kirschner.
Shuman, M. A. *See* Stenberg, McEver, Shuman, Jacques, and Bainton.
Shur, B. D. *See* Lopez, Bayna, Litoff, Shaper, Shaper, and Shur.
Silver, G., and Etlinger, J. D. Regulation of myofibrillar accumulation in chick muscle cultures: evidence for the involvement of calcium and lysosomes in non-uniform turnover of contractile proteins. 2383.
Silver, J. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Silvers, S. H. *See* Irwin, Silvers, and Mayne.
Simoni, R. D. *See* Kaplan and Simoni.
— *See* Kaplan and Simoni.
Simons, K. *See* Griffiths, Pfeiffer, Simons, and Matlin.
— *See* Pfeiffer, Fuller, and Simons.
Singer, S. J. *See* Maher, Cox, and Singer.
— *See* Rogalski and Singer.
Sklar, L. A., Omann, G. M., and Painter, R. G. Relationship of actin polymerization and depolymerization to light scattering in human neutrophils: dependence on receptor occupancy and intracellular Ca^{++}. 1161.
Slonczewski, J. L., Wilde, M. W., and Zigmond, S. H. Phosphorylase a activity as an indicator of neutrophil activation by chemotactic peptide. 1191.
Slot, J. W. *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
Smith, H. C., Spector, D. L., Woodcock, C. L. F., Ochs, R. L., and Bhorjee, J. Alterations in chromatin conformation are accompanied by reorganization of nonchromatin domains that contain U-snRNP protein p28 and nuclear protein p107. 560.
Smith, R. G., McManaman, J., and Appel, S. H. Trophic effects of skeletal muscle extracts on ventral spinal cord neurons in vitro: separation of a protein with morphologic activity from proteins with cholinergic activity. 1608.
Snell, W. J. *See* Imam, Buchanan, Shin, and Snell.
Snider, M. D. *See* Brands, Snider, Hino, Park, Gelboin, and Rothman.
Soll, D. R. *See* Varnum, Edwards, and Soll.
Soucy, L. J. *See* Vogl and Soucy.
Spector, D. L. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Spiele, H. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Spudich, J. A. *See* Sellers, Spudich, and Sheetz.
Squinto, S. P. *See* Kuettel, Squinto, Kwast-Welfeld, Schwoch, Schweppe, and Jungmann.
Steinkamp, J. A. *See* Crissman, Darzynkiewicz, Tobey, and Steinkamp.
Stenberg, P. E., McEver, R. P., Shuman, M. A., Jacques, Y. V., and Bainton, D. F. A platelet alpha-granule membrane protein (GMP-140) is expressed on the plasma membrane after activation. 880.
— *See* Boyles, Fox, Phillips, and Stenberg.
Sterchi, E. E. *See* Hauri, Sterchi, Bienz, Fransen, and Marxer.
Stewart, M., Kensler, R. W., and Levine, R. J. C. Three-dimensional reconstruction of thick filaments from *Limulus* and scorpion muscle. 402.
— *See* Kensler, Levine, and Stewart.
Stockdale, F. E. *See* Miller, Crow, and Stockdale.
Strous, G. J., Du Maine, A., Zijderhand-Bleekemolen, J. E., Slot, J. W., and Schwartz, A. L. Effect of lysosomotropic amines on the secretory pathway and on the recycling of the asialoglycoprotein receptor in human hepatoma cells. 531.
Strous, G. J. A. M. *See* Geuze, Slot, Strous, Hasilik, and von Figura.
Suárez-Quian, C. A. *See* Hadley, Byers, Suafez-Quian, Kleinman, and Dym.
Suchard, S. J. *See* Bourguignon, Suchard, Nagpal, and Glenney.
Suh, K. *See* Wallis, Ellis, Suh, and Pfenninger.
Suhan, J. P. *See* Welch and Suhan.
Sun, T.-T. *See* Dale, Holbrook, Kimball, Hoff, and Sun.
Sung, L. A., Kabat, E. A., and Chien, S. Interaction energies in lectin-induced erythrocyte aggregation. 652.
—, Kabat, E. A., and Chien, S. Interaction of lectins with membrane receptors on erythrocyte surfaces. 646.
Sussman, I., Prettyman, R., and O'Brien, T. G. Phorbol esters and gene expression: the role of rapid changes in K^+ transport in the induction of ornithine decarboxylase by 12-0-tetradecanoylphorbol-13-acetate in BALB/c 3T3 cells and a mutant cell line defective in $Na^+K^+Cl^-$ cotransport. 2316.
Swiedler, S. J. *See* Williams, Swiedler, and Hart.

T

Takemura, R. *See* Hirokawa, Takemura, and Hisanaga.
Tallant, E. A. *See* Cooper, McLaughlin, Tallant, and Cheung.
Tang, W.-J. Y. *See* Gibbons, Tang, and Gibbons.
Taniuchi, M., and Johnson, E. M., Jr. Characterization of the binding properties and retrograde axonal transport of a monoclonal antibody directed against the rat nerve growth factor receptor. 1100.
— *See* DiStefano, Schweitzer, Taniuchi, and Johnson.
Tank, D. W., Fredericks, W. J., Barak, L. S., and Webb, W. W. Electric field–induced redistribution and postfield relaxation of low density lipoprotein receptors on cultured human fibroblasts. 148.
—, Fredericks, W. J., Barak, L. S., and Webb, W. W. Correction. 2417.
Tao, W. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
Tardy, M. *See* Couchie, Fages, Bridoux, Rolland, Tardy, and Nunez.
Tashiro, Y. *See* Yamamoto, Masaki, and Tashiro.
Tassin, A. M., Paintrand, M., Berger, E. G., and Bornens, M. The Golgi apparatus remains associated with microtubule organizing centers during myogenesis. 630.
Taylor, D. L. *See* Luby-Phelps, Lanni, and Taylor.
— *See* McNeil, McKenna, and Taylor.
Teng, K. *See* Pan, Teng, Wu, Adam, and Johnstone.
Terranova, V. P., DiFlorio, R., Lyall, R. M., Hic, S., Friesel, R., and Maciag, T. Human endothelial cells are chemotactic to endothelial cell growth factor and heparin. 2330.
Thomas, K. *See* Lathrop, Thomas, and Glaser.
Thomas, K. A. *See* Schreiber, Kenney, Kowalski, Thomas, Gimenez-Gallego, Rios-Candelore, Di Salvo, Barritault, Courty, Courtois,

Moenner, Loret, Burgess, Mehlman, Friesel, Johnson, and Maciag.
Thompson, G. W. *See* Hoffman, Thompson, Griffin, and Price.
Thompson, J. *See* Turner, Thompson, Sariban-Sohraby, and Handler.
Tickle, C. *See* Eichele, Tickle, and Alberts.
Titus, D. E., and Becker, W. M. Investigation of the glyoxysome–peroxisome transition in germinating cucumber cotyledons using double-label immunoelectron microscopy. 1288.
Tobey, R. A. *See* Crissman, Darzynkiewicz, Tobey, and Steinkamp.
Todd, M. S. *See* Mehta, Orphe, Todd, Cornbrooks, and Carey.
Tooze, J. Blocked coated pits in AtT20 cells result from endocytosis of budding retrovirions. 1713.
Torrisi, M. R., and Bonatti, S. Immunocytochemical study of the partition and distribution of Sindbis virus glycoproteins in freeze-fractured membranes of infected baby hamster kidney cells. 1300.
Torri-Tarelli, F., Grohovaz, F., Fesce, R., and Ceccarelli, B. Temporal coincidence between synaptic vesicle fusion and quantal secretion of acetylcholine. 1386.
— *See* Haimann, Torri-Tarelli, Fesce, and Ceccarelli.
Touster, O. *See* Novikoff, Touster, Novikoff, and Tulsiani.
Toutant, M. *See* Whalen, Toutant, Butler-Browne, and Watkins.
Town, C. D. *See* Jentoft and Town.
Traas, J. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Triller, A., Cluzeaud, F., Pfeiffer, F., Betz, H., and Korn, H. Distribution of glycine receptors at central synapses: an immunoelectron microscopy study. 683.
Troy, F. A. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Truskey, G. A. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Tsukita, S., and Tsukita, S. Desmocalmin: a calmodulin-binding high molecular weight protein isolated from desmosomes. 2070.
Tsukita, S. *See* Tsukita and Tsukita.
Tucker, J. B., Mathews, S. A., Hendry, K. A. K., Mackie, J. B., and Roche, D. L. J. Spindle microtubule differentiation and deployment during micronuclear mitosis in *Paramecium*. 1966.
Tulsiani, D. P. *See* Novikoff, Touster, Novikoff, and Tulsiani.
Turner, R. J., Thompson, J., Sariban-Sohraby, S., and Handler, J. S. Monoclonal antibodies as probes of epithelial membrane polarization. 2173.
Tyndall, C. *See* Poruchynsky, Tyndall, Both, Sato, Bellamy, and Atkinson.

U

Urban-Pickering, M. *See* Wagner, Mayadas, Urban-Pickering, Lewis, and Marder.

V

Vacquier, V. D. *See* Ward, Brokaw, Garbers, and Vacquier.
Vahey, M. *See* Schneider, Sellers, Vahey, Preston, and Adelstein.
Valberg, P. A., and Albertini, D. F. Cytoplasmic motions, rheology, and structure probed by a novel magnetic particle method. 130.
Valdivia, M. M., and Brinkley, B. R. Fractionation and initial characterization of the kinetochore from mammalian metaphase chromosomes. 1124.
Vallee, R. B. *See* Hirokawa, Bloom, and Vallee.
van Deenen, L. L. M. *See* Christiansson, Kuypers, Roelofsen, Op den Kamp, and van Deenen.
Van Eldik, L. J. *See* Vantard, Lambert, De Mey, Picquot, and Van Eldik.
Vantard, M., Lambert, A.-M., De Mey, J., Picquot, P., and Van Eldik, L. J. Characterization and immunocytochemical distribution of calmodulin in higher plant endosperm cells: localization in the mitotic apparatus. 488.
Varnum, B., Edwards, K. B., and Soll, D. R. *Dictyostelium* amebae alter motility differently in response to increasing versus decreasing temporal gradients of cAMP. 1.
Vibert, P., and Craig, R. Structural changes that occur in scallop myosin filaments upon activation. 830.
Vimr, E. R. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Vogl, A. W., and Soucy, L. J. Correction. 689.
Vogt, V. M. *See* Muscarella, Vogt, and Bloom.
Volberg, T. *See* Geiger, Volk, and Volberg.
Volk, T. *See* Geiger, Volk, and Volberg.
Volpi, M. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
von Figura, K. *See* Geuze, Slot, Strous, Hasilik, and von Figura.
— *See* Schulze-Lohoff, Hasilik, and von Figura.

W

Wagner, D. D., Mayadas, T., Urban-Pickering, M., Lewis, B. H., and Marder, V. J. Inhibition of disulfide bonding of von Willebrand protein by monensin results in small, functionally defective multimers. 112.
Wall, D. A., and Hubbard, A. L. Receptor-mediated endocytosis of asialoglycoproteins by rat liver hepatocytes: biochemical characterization of the endosomal compartments. 2104.
—, **and Meleka, I.** An unusual lysosome compartment involved in vitellogenin endocytosis by *Xenopus* oocytes. 1651.
Wallis, I., Ellis, L., Suh, K., and Pfenninger, K. H. Immunolocalization of a neuronal growth-dependent membrane glycoprotein. 1990.
— *See* Ellis, Wallis, Abreu, and Pfenninger.
Wang, E. Rapid disappearance of statin, a nonproliferating and senescent cell-specific protein, upon reentering the process of cell cycling. 1695.
Wang, Y.-L. Exchange of actin subunits at the leading edge of living fibroblasts: possible role of treadmilling. 597.
— *See* McKenna, Meigs, and Wang.
Ward, G. E., Brokaw, C. J., Garbers, D. L., and Vacquier, V. D. Chemotaxis of *Arbacia punctulata* spermatozoa to resact, a peptide from the egg jelly layer. 2324.
Ward, K. K. *See* Jackson, Ward, and Haggerty.
Warren, G. *See* Featherstone, Griffiths, and Warren.
Warren, H. B. *See* Davies, Truskey, Warren, O'Connor, and Eisenhaure.
Watanabe, M. *See* Rutishauser, Watanabe, Silver, Troy, and Vimr.
Waterston, R. H. *See* Francis and Waterston.
Watkins, S. C. *See* Whalen, Toutant, Butler-Browne, and Watkins.
Watson, M. L. *See* Bursztajn, Berman, McManaman, and Watson.
Watt, F. M. *See* Zanetti, Ratcliffe, and Watt.
Weatherbee, J. A., May, G. S., Gambino, J., and Morris, N. R. Involvement of a particular species of beta-tubulin (beta3) in conidial development in *Aspergillus nidulans*. 706.
— *See* May, Gambino, Weatherbee, and Morris.
Webb, M. *See* Maro, Howlett, and Webb.
Webb, W. W. *See* Tank, Fredericks, Barak, and Webb.
Weber, K. *See* Bartnik, Osborn, and Weber.
Weintraub, H. *See* Harland and Weintraub.
Welch, W. J., and Suhan, J. P. Morphological study of the mammalian stress response: characterization of changes in cytoplasmic organelles, cytoskeleton, and nucleoli, and appearance of intranuclear actin filaments in rat fibroblasts after heat-shock treatment. 1198.
Wellner, R. B. *See* Ghosh, Wellner, Cragoe, and Wu.
Wells, J. R. E. *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Whalen, R. G., Toutant, M., Butler-Browne, G. S., and Watkins, S. C. Hereditary pituitary dwarfism in mice affects skeletal and cardiac myosin isozyme transitions differently. 603.
— *See* Wieczorek, Periasamy, Butler-Browne, Whalen, and Nadal-Ginard.
Wheeler, M. E., Gerrard, J. M., and Carroll, R. C. Reciprocal transmembrane receptor–cytoskeleton interactions in concanavalin A–activated platelets. 993.
White, J. R. *See* Yassin, Shefcyk, White, Tao, Volpi, Molski, Naccache, Feinstein, and Sha'afi.
White, J. *See* Doxsey, Sambrook, Helenius, and White.

Wieczorek, D. F., Periasamy, M., Butler-Browne, G. S., Whalen, R. G., and Nadal-Ginard, B. Co-expression of multiple myosin heavy chain genes, in addition to a tissue-specific one, in extraocular musculature. 618.
Wiedenmann, B., Lawley, K., Grund, C., and Branton, D. Solubilization of proteins from bovine brain coated vesicles by protein perturbants and Triton X-100. 12.
Wiegant, F. A. C. *See* Roos, Spiele, Feltkamp, Huisman, Wiegant, Traas, and Mesland.
Wilde, M. W. *See* Slonczewski, Wilde, and Zigmond.
Wiley, H. S. *See* Kaplan, McVey Ward, and Wiley.
Williams, D. B., Swiedler, S. J., and Hart, G. W. Intracellular transport of membrane glycoproteins: two closely related histocompatibility antigens differ in their rates of transit to the cell surface. 725.
Williams, D. L. *See* Winter, Palatnik, Williams, Coles, Wells, and Gordon.
Williams, L. K. *See* Landreth, Williams, and McCutchen.
— *See* Landreth, Williams, and Rieser.
Williams, R. K., Goridis, C., and Akeson, R. Individual neural cell types express immunologically distinct N-CAM forms. 36.
Williamson, J. R. *See* Busa, Ferguson, Joseph, Williamson, and Nuccitelli.
Willingham, M. C. *See* Chen, Murphy, Willingham, Pastan, and August.
Winkles, J. A., and Grainger, R. M. Differential stability of *Drosophila* embryonic mRNAs during subsequent larval development. 1808.
Winter, E., Levy, D., and Gordon, J. S. Changes in the H-1 histone complement during myogenesis. I. Establishment by differential coupling of H-1 species synthesis to DNA replication. 167.
—, **Palatnik, C. M., Williams, D. L., Coles, L. S., Wells, J. R. E., and Gordon, J. S.** Changes in the H-1 histone complement during myogenesis. II. Regulation by differential coupling of H-1 variant mRNA accumulation to DNA replication. 175.
Woloski, B. M. *See* Fuller, Otto, Woloski, McGary, and Adams.
Wong, D. T. W., and Biswas, D. K. Mechanism of benzo(a)pyrene induction of alpha-human chorionic gonadotropin gene expression in human lung tumor cells. 2245.
Wood, L., and Kaplan, A. Transit of α-mannosidase during its maturation in *Dictyostelium discoideum*. 2063.
Woodcock, C. L. F. *See* Smith, Spector, Woodcock, Ochs, and Bhorjee.
Woodcock-Mitchell, J. *See* Low, Woodcock-Mitchell, Mitchell, Arnold, and Absher.
Wright, R. L., Salisbury, J., and Jarvik, J. W. A nucleus/basal body connector in *Chlamydomonas reinhardtii* that may function in basal body localization or segregation. 1903.
Wu, C. *See* Pan, Teng, Wu, Adam, and Johnstone.
Wu, H. C. *See* Ghosh, Wellner, Cragoe, and Wu.

Y

Yamada, K. M. *See* Nagata, Humphries, Olden, and Yamada.
Yamamoto, A., Masaki, R., and Tashiro, Y. Is cytochrome P-450 transported from the endoplasmic reticulum to the Golgi apparatus in rat hepatocytes? 1733.
Yang, H.-Y. *See* Lieska, Yang, and Goldman.
Yassin, R., Shefcyk, J., White, J. R., Tao, W., Volpi, M., Molski, T. F. P., Naccache, P. H., Feinstein, M. B., and Sha'afi, R. I. Effects of chemotactic factors and other agents on the amounts of actin and a 65,000-mol-wt protein associated with the cytoskeleton of rabbit and human neutrophils. 182.
Yoshimura, A. *See* Ono, Mifune, Yoshimura, Ohnishi, and Kuwano.
Yoshioka, T. *See* Maruyama, Yoshioka, Higuchi, Ohashi, Kimura, and Natori.

Z

Zanetti, M., Ratcliffe, A., and Watt, F. M. Two subpopulations of differentiated chondrocytes identified with a monoclonal antibody to keratan sulfate. 53.
Zanini, A. *See* Rosa, Hille, Lee, Zanini, De Camilli, and Huttner.
Zervos, A. S., Hope, J., and Evans, W. H. Preparation of a gap junction fraction from uteri of pregnant rats: the 28-kD polypeptides of uterus, liver, and heart gap junctions are homologous. 1363.
Zetter, B. R. *See* Netland and Zetter.
Zieseniss, E., and Plattner, H. Synchronous exocytosis in *Paramecium* cells involves very rapid ($\leq$1 s), reversible dephosporylation of a 65-kD phosphoprotein in exocytosis-competent strains. 2028.
Zigmond, S. H. *See* Daukas and Zigmond.
— *See* Slonczewski, Wilde, and Zigmond.
Zijderhand-Bleekemolen, J. E. *See* Strous, Du Maine, Zijderhand-Bleekemolen, Slot, and Schwartz.
Zimmerberg, J., Sardet, C., and Epel, D. Exocytosis of sea urchin egg cortical vesicles in vitro is retarded by hyperosmotic sucrose: kinetics of fusion monitored by quantitative light-scattering microscopy. 2398.